

From the above description I am inclined to call *Helix minima* a synonym of *Punctum minutissimum* (Lea). The broad and deep umbilicus places it close to *Striatura milium* (Morse) and *S. ferrea* (Morse), but these are much lighter in color than *Helix minima*, which is closest in that character to *P. minutissimum*.

This is not *Helix minima* of E. F. Schlotheim, Mineralogisches Taschenbuch, 1818, 340, nor *Helix (Hyalina) minima* of J. C. Cox, Monograph of Australian Landshells, in 1868, 10. Louis Pfeiffer mentions another *Helix minima* in his Monographia Heliceorum Viventium, vol. 7, 1876, p. 112, but this species was described as *Macrochlamys minima* by H. Adams in the Proceedings of the Zoological Society of London in 1867 on page 303.

W. G. Binney in the Smithsonian Miscellaneous Collections, vol. 5, 1863, in the "Bibliography of North American Conchology previous to the year 1860," on page 253, lists Joseph True's article "Shells Gathered about Salem, Mass., with particular localities designated, and remarks on the species," but does not give the complete list of shells. Binney's list ends with *Crepidula fornicata*, which in True's list is at bottom of page 192 in the Proceedings Essex Institute, at the end of signature 24 of volume 2. Signature 25 begins on page 193, the part which contains the description of *Helix minima*, which part apparently Binney did not see, otherwise he would have mentioned this species in his Manual of American Land Shells and other works.

From the above evidence *Helix minima* True can be regarded as a synonym of *Punctum minutissimum* (Lea).

---

## A MOLLUSCAN MASS GRAVE

By MORRIS K. JACOBSON

Our larger eastern American land molluscs, with some exceptions, are notoriously solitary in habits. Hence reports of any large congregations of a pulmonate so persistently solitary as *Triodopsis tridentata* (Say) might prove of some interest, especially if such congregations take place in so unfavorable a location as the limestone-free and granitic region about Peekskill, New York.

On July 30, 1943, I uncovered a "grave" of thirty-one mature bleached and eroded but completely identifiable specimens of the above named species in a crevice between two soil-covered rocks on the eastern slope of a small ravine. The space the shells occupied was about three inches deep and two inches across and was generously filled with gravelly sand. The molluscs were packed tightly one against the other, with a thin layer of sand between.

That this congregation was not brought together by a mechanical agent, but rather resulted from the voluntary actions of the animals themselves, must be assumed from the following facts:

(1) Since only one species was represented among the specimens, it is hardly likely that a bird or animal collected them, since the existence of so selective a molluscophage has not been demonstrated in this section of our country.

(2) There were no streams or rivulets near the grave site, even if it could be assumed that a stream could bring such a collection together.

(3) Had a conchologist collected the molluscs, it is inconceivable that he would have left so rich a haul in the field.

It must be assumed then that our unfortunate molluscs gathered under conditions described as follows by Binney in 1869 (Smith. Misc. Coll. 194, Part I, P. 2):

In the early days of spring, they (the *Geophila*) sometimes assemble in considerable numbers, in warm and sunny situations, where they pass hours of indolent enjoyment of the warmth and animating influence of the sunshine. Whether these meetings serve any useful purpose in the economy of the animal, or are caused by the pleasurable sensation, and renewed strength derived from the warmth of the situation after the debility of their winter's torpidity is uncertain; it is probable, however that they precede the business of procreation. It is certain that they last but a short time, and that after early spring, the animals are to be found in their usual retreats."

The answer to the question of what caused the wholesale slaughter I uncovered, can perhaps be seen in an uprooted tree, some yards above the grave site. In early March some years ago, while our molluscs were thus basking in the warming rays

of the sun, a sudden storm uprooted the tree and the ensuing rain washed a miniature landslide over our luckless congregation in the stone crevice. Just below the grave I found seven more shells, probably members of the same group.

Although such an occurrence must be very rare indeed, perhaps it can find a place among the list of natural controls of the molluscan population. At any rate it shows that the effect of storms and rains cannot be entirely excluded.

---

## SNAILS HOARDED BY *BLARINA* AT ITHACA, NEW YORK

By WILLIAM MARCUS INGRAM

Mills College, California

It is well known that the short-tailed shrew, *Blarina brevicauda* (Say), hoards snail and insect food (Merriam 1886), (Shull 1907), (Hamilton 1930). Additional information is presented here concerning the interesting storage habit of *Blarina*. These data were gathered from a small, rock strewn, sycamore flood plain in Six Mile Creek near Cornell University, Ithaca, New York. The period of observation extended from September 15, 1940, to January 3, 1941. Shrews were found hoarding snail food in both the fall and winter. Previous observations made from June 15 to September 1, 1940, on the Edmund Niles Huyck Preserve, Rensselaerville, Albany County, New York, have shown that *Blarina* will also hoard food during the summer months even though a food supply is abundant.

One shrew storage chamber opened in September revealed living individuals of the following species of mollusks: one *Anguispira alternata* (Say), three *Stenotrema hirsutum* (Say), and two *Ventridens intertextus* (Binney). These snails were active and were in no way injured. Five days later the storage chamber was reopened; all of the snails but two *S. hirsutum* had been broken open and eaten. The two unaccounted for *S. hirsutum* were nowhere to be found; no additions had been made to the storage chamber in the five day interval.